Key Issues/Resolutions from Facilitated Discussions

KEY ISSUES	IMPACTS	RESOLUTION / ACTION
Delivery System Strategy / State of the Art	Ability to effectively deploy nutrients or amendments to the TCE-contaminated groundwater plume in areas of low soil conductivity.	Critical element in evaluation of an integrated treatment approach.
Basis for Achieving Clean-up Goals	Preliminary Remediation Goals (PRGs) have been set for TCE and vinyl chloride.	Bioremediation much be able to achieve PRGs that are set for TCE at 5 μg/L and vinyl chloride (VC) at 2 μg.
Data Gaps / Information Needs	Additional characterization or modeling data may be necessary to support proposal preparation and/or optimize treatment design and strategy decisions.	The Portsmouth site will assess existing sources of data to support vendors' needs. The site will identify the data sources to be made available to all pre-qualified candidates. The TechCon web site will be used to facilitate the dissemination of this information.
State of the Art	The technology is adequately developed, but uncertainties exist for kinetics	Preliminary groundwater model and remediation kinetics will need to be used to support bioremediation approach
Aerobic vs. Anaerobic	Selected process should be compatible with existing subsurface environment and degradation process for TCE and VC.	Although both processes will work anaerobic biodegradation is probably a better choice due to indigenous conditions.
Permeability of the Soil Matrix	Ability to effectively deploy nutrients or amendments to the TCE-contaminated groundwater plume in areas of low soil permeability.	Critical element in evaluation of an integrated treatment approach.
Heterogeneity	Affects design strategy and ability to validate uniform treatment of aquifer.	Vendors' experiences will have to drive their approach for uniform treatment of the aquifer.

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Engineering Design / Optimization	(See Data Gaps / Information Needs)	Vendors' must rely on past project experience and modeling support.
Life Cycle Cost	Ability to provide uniform distribution of nutrients and kinetics of biotreatment of the aquifer will dictate overall cost.	Modeling support of the aquifer and the bioremediation approach will be needed to better estimate life-cycle cost.
Adequate Characterization of Area	Additional characterization or modeling data may be necessary to support proposal preparation and/or optimize treatment design and strategy decisions.	The Portsmouth site feels the existing site characterization data is sufficient. However, additional treatability testing will be performed to support proposal preparation and design optimization.
Build Flexibility into the RFP	This would allow the vendors to tailor their proposals and treatment approach to the technology.	The Portsmouth site will evaluate the suggestions and concerns raised during the forum when structuring the RFP.
Data Specific to the 1 Acre Pilot Site	Vendor concern that the data for the 1 acre site may not be representative of the entire 13 acre site, and consequently affect the design and performance.	The Portsmouth site feels they have designated a representative area that will not be affected by a source area.
Bidding Both Phases (1 Acre / 13 Acres)	Would provide more flexibility in design and economy.	The Portsmouth site will evaluate the performance of Phase I (1 acre pilot site)
Vendor Input on Pilot Test Area Size and Location	(see Data Specific to the 1 Acre Pilot Site)	Possibility to conduct a phased approach to the project.
Soil Samples to Evaluate Approach – Treatability Testing	Treatability testing would provide microbiological data to support development of the technology approach and system design.	The Portsmouth site will provide pre-qualified vendors a saturated soil sample from the Portsmouth Gallia media to perform bio-performance testing. Vendors must have a NRC laboratory under contract.
ORIS Database Availability	Source for available groundwater and soil data to support vendor requests for additional information.	The Portsmouth site indicated the availability of the database on the Portsmouth Web Site. The TechCon web site will be used to facilitate the dissemination of this information.

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Groundwater Modeling Data	Delivery system design and optimization.	The Portsmouth site is compiling: 1) Model input data files for the FRAC3DVS v3.1 Groundwater Model. 2) The Numerical Groundwater Flow and Transport Modeling data from the Portsmouth Gaseous Diffusion Plant Quadrant I CAS/CMS Final Report. The TechCon web site will be used to facilitate the dissemination of this information.
Impact of Bio-deployment on Phytoremediation	Ability to use bioremediation and phyto-remediation together	No impact bioremediation is expected from deployment of phytoremediation
Radiological Constituents	Treatability testing, material handling, training requirements, system design.	Uranium and technetium-99 may be present in the groundwater plume. Treatability testing will be performed at a NRC laboratory.
Information Exchange Using the TechCon Web Site	Effective vehicle for disseminating information among the project team, technical advisory group and commercial vendors. Could also provide a platform for direct communication on project related issues between these groups.	The Portsmouth team is interested in utilizing the TechCon web site to provide the vehicle for information exchange. TechCon action item.